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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,831	11/14/2003	Michael D. Stevens	HES 2003-IP-011882U1	3205
29920	7590	12/30/2005	EXAMINER	
JOHN W. WUSTENBERG			DANG, HOANG C	
P.O. BOX 1431			ART UNIT	
DUNCAN, OK 73536			PAPER NUMBER	

3672

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/714,831	<b>Applicant(s)</b> STEVENS ET AL.	
	<b>Examiner</b> Hoang Dang	<b>Art Unit</b> 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) 16-19,36-44,63-66 and 69-71 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15,20-35,45-62,67 and 68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) 16-19,36-44,63-66 and 69-71 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/14/2003</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of the species of Figures 2-10, claims 1-15, 20-35, 45-62, 67 and 68 in the reply filed on December 16, 2005 is acknowledged.
2. Claims 16-19, 36-44, 63-66 and 69-71 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on December 16, 2005.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-14, 20-35, 45-62 and 68 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by LaFleur (US 5,433,270) (see column 8, line 67 through column 9, line 14; and column 9, lines 28-40).

With respect to the embodiment of figures 2-7, either the outer coating (68, 90, 119, 162) alone or the outer coating and the secondary cylindrical core member (66, 88, 118, 158) constitute the "outer foam sleeve" as recited.

Either wiper portion (74, 106, 132) of embodiment of figures 2-4 and 7 or the nose 160 of Figure 6 of LaFleur constitutes the "nose" as recited.

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 5-13, 20-24, 32-34, 45-48, 67 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treece (US 6,196,311) or Tessier et al (US 6,951,246) in view of Cato (US 4,069,535) or Lafleur (US 5,433,270).

Treece or Tessier et al disclose the invention as claimed except for the use of a foam outer sleeve. LaFleur teaches forming a cementing plug body of foam material so that it can be drilled out more effectively by PDC drill bits (see column 1, lines 36-60; column 8, line 67 through column 9, line 14; and column 9, lines 28-40). Cato teaches forming a pipeline pig of a foam type material in order to provide an effective seal between the pig and pipeline and to prevent it from being stuck during its operation (see column 1, lines 9-20 and 59-61). It is noted that pipeline pigs are substantially equivalent to cementing pistons since they both are used for batching and separation of different types of petroleum liquids pumped down a conduit and for cleaning and scraping the walls of the conduit. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the outer sleeve of the cementing plugs of Treece or Tessier et al of a foam material in view of the teaching of Cato or LaFleur for the advantages pointed out above.

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5. Claims 1-3, 5, 8-15, 19-24, 32-35, 45-49, 67 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman (US 4,836,279) in view of Cato (US 4,069,535) or Lafleur (US 5,433,270).

Freeman discloses the invention as claimed except for the use of a foam outer sleeve. LaFleur teaches forming a cementing plug body of foam material so that it can be drilled out more effectively by PDC drill bits (see column 1, lines 36-60; column 8, line 67 through column 9, line 14; and column 9, lines 28-40). Cato teaches forming a pipeline pig of a foam type material in order to provide an effective seal between the pig and pipeline and to prevent it from being stuck during its operation (see column 1, lines 9-20 and 59-61). It is noted that pipeline pigs are substantially equivalent to cementing pistons since they both are used for batching and separation of different types of petroleum liquids pumped down a conduit and for cleaning and scraping the walls of the conduit. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the outer sleeve of the cementing plugs of Freeman of a foam material in view of the teaching of Cato or LaFleur for the advantages pointed out above.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

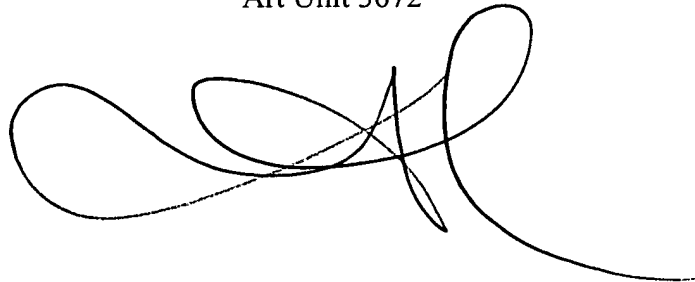
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Dang whose telephone number is 571-272-7028. The examiner can normally be reached on 9:15-5:45 Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoang Dang  
Primary Examiner  
Art Unit 3672

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the right.